

WHAT IS CLAIMED IS:

1. A method of loading material into a dump body of a truck using a loading bucket whose volumetric capacity is approximately 1/4 or more than that of the dump body, the dump body having sidewalls and a floor, where the sidewalls are spaced relatively wider than conventional dump bodies of similar volumetric capacity, and the loading bucket having a door at a lower end thereof that when free, swings open and allows the material contained in the loading bucket to drop into the dump body, the method comprising the steps of:

filling the loading bucket with an amount of earthen material;

positioning the loading bucket over the dump body;

lowering the bucket to a position that

(a) substantially minimizes the clearance between the floor of the dump body and the swinging door in its freed position so as to minimize splattering of the material dropped as it drops from the bucket into the dump body, thereby reducing the impact force on the dump body caused by the dropping material,

(b) allows the swinging door to clear the sidewalls of the dump body as it swings through an arc after it is freed, and

(c) allows the material to be discharged substantially in the center of the dump body so as to produce a more balanced load on the dump body; and

freeing the swinging door so as to open the bucket and allow the material held in the bucket to drop into the dump body, whereby the door swings open and clears both the sidewalls and the floor of the dump body while minimizing the height from which the material is dropped from the bucket, which is unlike the conventional dump

bodies wherein the swinging door either collides with one of the sidewalls of the conventional dump body, drops the material from the bucket substantially off the center of the body or drops the material from a substantially greater height.

2. A body of a vehicle for hauling material, the body made by the following process:

- (a) determining the desired load distribution of weight on a chassis of the haulage vehicle;
- (b) determining the desired volumetric capacity for the body;
- (c) establishing a line for a floor, a line for a front wall of the body and an inside body width;
- (d) developing a three dimensional model of the hauled material carried in the body, including modeling corner voids of the hauled material, using data collected from an anticipated point of use with the three dimensional model of the hauled material having a distribution of weight on the chassis;
- (e) adjusting a set of design parameters of the body until the three dimensional model distribution of weight on the chassis is substantially similar to the desired distribution of weight on the chassis and the volumetric capacity of the body is substantially similar to the desired volumetric capacity, including curving a rear edge of the floor to correspond with rear corner voids in the three-dimensional model; and
- (f) producing the body in accordance with the set of design parameters.